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1-21. (cancelled)

1 ~~22.~~ (previously presented) A fiber reinforced core adapted for infusion with a hardenable resin and having opposite core surfaces adapted to be attached to corresponding skins, said core comprising plastics foam material forming said core surfaces, a plurality of rows of reinforcing struts extending between said opposite core surfaces, each of said struts comprising porous and fibrous rovings enclosed by said foam material, and said struts having cut and flared end portions overlying at least one of said core surfaces.

2 ~~23.~~ (previously presented) A core as defined in claim ~~22~~ and including skins of porous and fibrous material adjacent said opposite core surfaces, and said end portions of said rovings extend through said skins.

3 ~~24.~~ (previously presented) A core as defined in claim ~~22~~ wherein said rows of struts extend at acute angles relative to said core surfaces.

4 ~~25.~~ (previously presented) A core as defined in claim ~~22~~ wherein adjacent said rows of struts cross within said core.

5 ~~26.~~ (previously presented) A core as defined in claim ~~22~~ and including grooves within said foam material along said opposite core surfaces, and rovings extending within said grooves and receiving said flared end portions of said struts.

27-38. (cancelled)

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⁶ ~~39~~. (previously presented) A core as defined in claim 22 wherein said rovings include a heat activated adhesive resin.

⁷ ~~40~~. (previously presented) A core as defined in claim 22 wherein said strips comprise translucent foam material and including translucent skins overlying said core surfaces.

41-56. (cancelled)

⁸ ~~57~~. (previously presented) A fiber reinforced core panel adapted for use with a hardenable resin and having opposite core surfaces adapted to be attached to corresponding skins, said core panel comprising a plurality of elongated strips of low density cellular material, adjacent said strips having opposing faces within an interior of said core panel between said opposite core surfaces, webs of fibrous material separating said opposing faces of said adjacent strips and extending between said opposite core surfaces, portions of said webs being exposed at said opposite core surfaces, a plurality of rows of reinforcing struts extending between said opposite core surfaces at an acute angle relative to said webs and extending through said webs at locations spaced from said core surfaces, said struts comprising fibrous rovings enclosed by said strips, and said webs and the intersecting said struts cooperating to resist buckling of said webs and said struts within said strips under loading for substantially increasing the strength of a structural panel incorporating said core panel.

⁹ ~~58~~. (previously presented) A core panel as defined in claim ⁸~~57~~ and including skins of porous and fibrous material adjacent said opposite core surfaces, and said rovings also extend through said skins.

- 10 ~~58.~~ (previously presented) A core panel as defined in claim ~~57~~ wherein said webs and said rovings include a heat activated resin. 8
- 11 ~~60.~~ (previously presented) A core panel as defined in claim ~~57~~ wherein each of said webs is disposed at an acute angle relative to said core surfaces. 8
- 12 ~~61.~~ (previously presented) A core panel as defined in claim ~~57~~ wherein said webs are integrally connected and form a continuous corrugated pattern in cross-section through said strips. 8
- 13 ~~62.~~ (previously presented) A core panel as defined in claim ~~57~~ wherein said webs comprise portions of fibrous rovings helically surrounding each of said strips along the length thereof. 8
- 14 ~~63.~~ (previously presented) A core panel as defined in claim ~~62~~ and including generally parallel and continuous fibrous rovings extending longitudinally along said strips adjacent said helically surrounding rovings. 13
- 15 ~~64.~~ (previously presented) A core panel as defined in claim ~~57~~ wherein each of said strips has a generally triangular cross-sectional configuration. 8
- 16 ~~65.~~ (previously presented) A core panel as defined in claim ~~57~~ and including resin distribution grooves extending internally within said strips and spaced from said core surfaces and intersecting said webs and the intersecting said struts for supplying resin to said core surfaces through said webs and said struts. 8

17 ~~66~~. (previously presented) A core panel as defined in claim ~~65~~ and including at least one skin having inner and outer layers of porous and fibrous material, and a resin barrier film of adhesive material between said layers. 16

18 ~~67~~. (previously presented) A core panel as defined in claim ~~57~~ wherein said strips comprise translucent foam material, and including translucent skins overlying said core surfaces. 8

19 ~~68~~. (previously presented) A core panel as defined in claim ~~57~~ and including at least one internal sheet of porous and fibrous material extending within said core generally parallel to said opposite core surfaces, and said struts extend through said sheet. 8

20 ~~69~~. (previously presented) A fiber reinforced core panel adapted for use with a hardenable resin and having opposite core surfaces adapted to be attached to corresponding skins, said core panel comprising a plurality of elongated strips of low density cellular material, a first layer of fibrous rovings continuously and helically surrounding each of said strips along the length thereof, a second layer of fibrous rovings continuously and helically surrounding said first layer on each said strip along the length thereof, said rovings in said second layer extend helically in an opposite direction and crossing said rovings in said first layer, said elongated strips and said helically surrounding rovings are connected together to form a unitized said core panel with said rovings extending over said core surfaces for receiving the skins and adapted to be moved as a preform unit to a molding process where the resin is hardened.

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- 21 ~~70~~. (previously presented) A core panel as defined in claim ~~69~~ and including generally parallel continuous fibrous rovings extending longitudinally along each of said strips adjacent a layer of helically extending rovings.
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- 22 ~~71~~. (previously presented) A core panel as defined in claim ~~69~~ wherein each of said strips of material has generally a triangular cross-sectional configuration.
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- 23 ~~72~~. (previously presented) A core panel as defined in claim ~~69~~ wherein the elongated strips and surrounding rovings are connected together prior to hardening the resin by skin members overlying said core surfaces.
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- 24 ~~73~~. (previously presented) A core panel as defined in claim ~~69~~ and including a plurality of rows of stitched rovings forming reinforcing struts extending between said opposite core surfaces, and said struts are enclosed by said strips.
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- 25 ~~74~~. (previously presented) A core panel as defined in claim ~~73~~ wherein said strips have parallel spaced grooves within said core surfaces, and said stitched rovings extend within said grooves.
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- 26 ~~75~~. (previously presented) A core panel as defined in claim ~~69~~ wherein said rovings include a heat activated resin.
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- 27 ~~76~~. (previously presented) A core panel as defined in claim ~~69~~ wherein said rovings are porous for receiving a hardenable adhesive resin.

28 ~~77~~ (previously presented) A core panel as defined in claim ~~76~~ and including internal resin distribution grooves extending within said strips and spaced inwardly from said opposite surfaces and intersecting said rovings between said strips for supplying resin to said core surfaces through said rovings. 27

29 ~~78~~ (previously presented) A core panel as defined in claim ~~77~~ and including at least one skin having inner and outer layers of porous and fibrous material, and a resin barrier film of adhesive material between said layers of said skin. 28

30 ~~79~~ (previously presented) A core panel as defined in claim ~~69~~ wherein said strips comprise translucent foam material and including translucent skins overlying said core surfaces. 20

31 ~~80~~ (previously presented) A core panel as defined in claim ~~69~~ and including at least one internal sheet of fibrous material extending within each of said strips generally parallel to said opposite core surfaces. 20

32 ~~81~~ (previously presented) A core panel as defined in claim ~~69~~ and including longitudinally spaced internal transverse reinforcing members extending laterally within each of said strips and to said core surfaces. 20

33 ~~82~~ (previously presented) A core panel as defined in claim ~~69~~ wherein adjacent said rovings are spaced from each other. 20

34 ~~83~~ (previously presented) A core panel as defined in claim ~~69~~ and including generally continuous fibrous rovings extending laterally across said strips. 20

35 84. (previously presented) ²⁰ A core panel as defined in claim 69 and including skins of preformed substantially rigid sheet material.

36 85. (currently amended) A fiber reinforced core panel adapted for use with a hardenable resin and having opposite core surfaces adapted to be attached to corresponding skins, said core panel comprising a plurality of elongated strips of low density cellular material, a layer of fibrous rovings continuously and helically surrounding each of said strips along the length thereof, said elongated strips and said helically surrounding rovings are connected together to form a unitized said core panel, and ~~said layer of rovings surrounding each said strip being adjacent said layer of rovings of each laterally adjacent said strip and extending over said core surfaces for receiving the skins and adapted to be moved~~ said rovings extending continuously over said opposite core surfaces to substantially increase the area of resin bond between said rovings and the skins, said rovings also extending completely through the thickness of said core panel between said strips to tie the skins together, and said core panel being movable as a unit to a molding process where the resin is hardened.

37 86. (previously presented) ³⁶ A core panel as defined in claim 85 and including a second layer of fibrous rovings continuously and helically surrounding the first said layer on each said strip along the length thereof, and said rovings in the second said layer extend helically in an opposite direction and cross said rovings in the first said layer.

38 87. (previously presented) ³⁶ A core panel as defined in claim 85 wherein all of said rovings surrounding each said strip extend helically in the same angular

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direction, and said rovings on each said strip cross said rovings on each laterally adjacent strip.

~~39~~ 88. (previously presented) A core panel as defined in claim ~~85~~ wherein each of said strips of material has generally a triangular cross-sectional configuration.

~~40~~ 89. (previously presented) A core panel as defined in claim ~~85~~ wherein the elongated strips and surrounding rovings are connected together prior to hardening the resin by skin members overlying said core surfaces.

~~41~~ 90. (previously presented) A core panel as defined in claim ~~85~~ and including a plurality of rows of stitched rovings forming reinforcing struts and extending between said opposite core surfaces, and said struts are enclosed by said strips.

~~42~~ 91. (previously presented) A core panel as defined in claim ~~90~~ wherein said strips have parallel spaced grooves within said core surfaces, and said stitched rovings extend within said grooves.

~~43~~ 92. (previously presented) A core panel as defined in claim ~~85~~ wherein said rovings include a heat activated resin.

~~44~~ 93. (previously presented) A core panel as defined in claim ~~85~~ wherein said rovings are porous for receiving a hardenable adhesive resin.

~~45~~ 94. (previously presented) A core panel as defined in claim ~~93~~ and including internal resin distribution grooves extending within said strips and spaced inwardly

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from said opposite surfaces and intersecting said rovings between said strips for supplying resin to said core surfaces through said rovings.

46 95. (previously presented) 45 A core panel as defined in claim 94 and including at least one skin having inner and outer layers of porous and fibrous material, and a resin barrier film of adhesive material between said layers of said skin.

47 96. (previously presented) 36 A core panel as defined in claim 85 wherein said strips comprise translucent foam material and including translucent skins overlying said core surfaces.

48 97. (previously presented) 36 A core panel as defined in claim 85 and including at least one internal sheet of fibrous material extending within each of said strips generally parallel to said opposite core surfaces.

49 98. (previously presented) 36 A core panel as defined in claim 85 and including longitudinally spaced internal transverse reinforcing members extending laterally within each of said strips and to said core surfaces.

50 99. (previously presented) 36 A core panel as defined in claim 85 wherein adjacent said rovings are spaced from each other.